## CLAIMS:

- 7. The method of claim 1 wherein the dehydratases are selected from the group consisting of <u>glycerol</u> <u>dehydratase</u> and diol dehydratase.
- 8. The method of claim 1 further comprising providing genes encoding an enzyme selected from the group consisting of <u>aldehyde dehydrogenase</u> and 1,3-propanediol oxidoreductase.
- 15. The system of claim 9 wherein the vicinal diol dehydratase is selected from the group consisting of glycerol dehydratase and diol dehydratase.
- 16. The system of claim 9 further comprising genes encoding an enzyme selected from the group consisting of <u>aldehyde dehydrogenase</u> and 1,3-propanediol oxidoreductase.